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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,813	08/19/2003	Kouji Oohara	SIC-03-024	1812
29863	7590	11/26/2010	EXAMINER	
DELAND LAW OFFICE			PARRIES, DRU M	
P.O. BOX 69			ART UNIT	PAPER NUMBER
KLAMATH RIVER, CA 96050-0069			2836	
			NOTIFICATION DATE	DELIVERY MODE
			11/26/2010	ELECTRONIC

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KOUJI OOHARA

Appeal 2009-007794
Application 10/604,813
Technology Center 2800

Before SCOTT R. BOALICK, CARLA M. KRIVAK, and
BRADLEY W. BAUMEISTER, *Administrative Patent Judges*.

BOALICK, *Administrative Patent Judge*.

Concurring Opinion filed by *Administrative Patent Judge* BAUMEISTER

DECISION ON REQUEST FOR RECONSIDERATION¹

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the “MAIL DATE” shown on the PTOL-90A cover letter attached to this decision.

Appellant requests rehearing under 37 C.F.R. § 41.52 of our Decision on Appeal entered June 11, 2010 (“Decision” or “Dec.”) wherein we affirmed the Examiner’s final rejection of claims 28-48.

On reconsideration, we find that the shifter motor 29 of Spencer would not implicitly teach a CPU for receiving control signals from the controller. We therefore *grant* the Request for Rehearing with respect to this issue. The Request for Rehearing is otherwise *denied*. Accordingly, the Request for Rehearing is *granted-in-part*.

DISCUSSION

Claim 28

Combination of Spencer and the APA

Appellant persuasively argues that the Board erred in stating that “it has not been shown that combining Spencer with the APA would require any additional CPUs” (Req. for Reh’g 2; *see* Dec. 8) because “Spencer’s shifter motor 29 implicitly teaches a CPU for receiving control signals from the controller 21” (Req. for Reh’g 2-3; *see* Dec. 7). In particular, Appellant has persuasively presented factual arguments that the shifter motor 29 of Spencer is controlled by a motor drive circuit 130 that receives signals (i.e., “MOTOR0” and “MOTOR1”) from a micro processor 101 or controller 21. (Req. for Reh’g 3.) Therefore, the shifter motor 29 would not implicitly include a CPU to receive control signals from the controller 21 because the motor drive circuit 130 performs the function of receiving such control signals from the controller 21.

However, this does not change our affirmance of the rejection since the Decision also articulates the rationale that it would have been obvious to combine Spencer and the APA because a person of ordinary skill in the art

would recognize that the number of wires between electrical components would be reduced. (Dec. 7-8.)

With respect to this rationale, Appellant argues that “any benefits of reducing wires must be balanced against the additional cost of providing a CPU for each component plus the additional cost of the manpower to program each CPU to decode the composite signal and extract the relevant control signals.” (Req. for Reh’g 4.) In particular, Appellant argues that “in the Spencer, et al system, there would be a maximum saving of two wires between controller (21) and shifter motor (29) if the three signals were communicated on a single line.” (Req. for Reh’g 4.) Thus, Appellant argues, “[o]ne of ordinary skill in the art knows very well that the cost of a CPU and a decoder (not to mention the cost of programming) is far greater than the cost of two wires.” (Req. for Reh’g 4.)

However, Appellant has not provided any convincing evidence regarding the total cost of the two wires and the cost of the CPU. Although Appellant argues that “Spencer, et al’s Figs. 10 and 13A provide sufficient documentary evidence” (Req. for Reh’g 4), such figures do not provide any cost analysis for components such as wiring or a CPU. Arguments of counsel cannot take the place of factually supported objective evidence. *See, e.g., In re Huang*, 100 F.3d 135, 139-40 (Fed. Cir. 1996). Furthermore, as stated in the Decision (Dec. 8-9), even if the total cost of saving wires would result in additional expense due to the cost of the CPU, this does not mean that persons skilled in the art would not make the combination. *See In re Farrenkopf*, 713 F.2d 714, 718 (Fed. Cir. 1983).

Combination of Spencer and Tarpenning

First, Appellant argues that the simple substitution of the LCD display 76 of Tarpenning for the display 31 of Spencer is improper because “the control signals would be destroyed and the LCD display (76) would be rendered inoperative.” (Req. for Reh’g 6.) In particular, Appellant refers to a block diagram in which a “Power Stabilizing Circuit” stabilizes power for both a “First Electrical Bicycle Component” and a “Second Electrical Bicycle Component.” (Req. for Reh’g 6.)

Appellant’s arguments are not persuasive because Appellant has not provided any convincing evidence that one of ordinary skill in the art would only configure the components of the applied references according to this block diagram (Req. for Reh’g 6). Furthermore, Appellant has also provided no convincing evidence that the configuration illustrated in the block diagram is inoperative. Again, arguments of counsel cannot take the place of factually supported objective evidence. *See, e.g., Huang*, 100 F.3d at 139-40.

In addition, page 11, lines 20-24 of the Decision articulates that:

[M]odifying Spencer and Tarpenning to include Schwaller’s switching controller 1 would have been obvious because a person of ordinary skill in the art would recognize that Schwaller’s switching controller 1 would *improve the backlight for the LCD display 76 of Tarpenning by preventing overvoltages at higher bicycle speeds.* (Emphasis added.)

Thus, a person of ordinary skill in the art would configure Schwaller’s switching controller 1 (i.e., the claimed “power stabilizing circuit”) to provide stabilized power to the backlight for the LCD display 76 of Tarpenning (i.e., the claimed “second electrical bicycle component”).

Second, Appellant argues that the Board's statement "because the backlight of Tarpenning's LCD display 76 receives only power . . . , one of ordinary skill would recognize that the backlight would not require the APA's control signal component of the composite signal" implies a block diagram in which a "Power/Control Decoders" decodes the composite signal into control signals and power signals and a "Power Stabilizer" stabilizes the power for both the "First Electrical Bicycle Component" and "Second Electrical Bicycle Component." (Req. for Reh'g 7.) However, Appellant has not provided any convincing evidence that one of ordinary skill in the art would only configure the components of the applied references according to this block diagram (Req. for Reh'g 7). Appellant also reiterates the argument that "Schwaller does not use composite signals anywhere, and certainly not as an input to Schwaller's switching controller (1)." (Req. for Reh'g 7.) However, as stated in the Decision, "the Examiner cited the APA for disclosing the composite signal," rather than Schwaller. (Dec. 12; *see also* Ans. 4-5; FF 3.)

Third, Appellant argues that the Reply Brief illustrates "how the actual physical system proposed by the examiner *increased* the number of wires that would be required if a CPU were added to Tarpenning's LCD display (76) and if composite signals were used in the manner suggested by the examiner" and "[t]he drawings in those prior art patents provide the objective documentary evidence that show how the Appellant's arguments are true." (Req. for Reh'g 8.) However, Appellant has not provided any convincing evidence that one of ordinary skill in the art would only configure the components of the applied references according to the description provided in the Reply Brief. Once again, arguments of counsel

cannot take the place of factually supported objective evidence. *See, e.g., Huang*, 100 F.3d at 139-40.

Finally, Appellant argues that “[t]here seems to be a pervasive misunderstanding of the scope of the APA.” (Req. for Reh’g 8.) In particular, Appellant argues that in order to establish “that the number of wires required between the electrical components inherently will be reduced for all systems regardless of the configuration of the components . . . [t]here must be 100% certainty.” (Req. for Reh’g 8.) However, Appellant’s argument regarding the law of inherency under 35 U.S.C. § 102 is not germane because claim 28 was rejected under 35 U.S.C. § 103(a).

Claim 39

Appellant argues that the Board erred in stating “that the reading from Spencer, et al’s wheel speed sensor 23 (the ‘speed indicating signal’) is transmitted to the controller 21 and to the shifter motor 29.” (Req. for Reh’g 9.) In particular, Appellant argues that from Spencer, “[t]he signal from wheel speed sensor (23) is designated WHLSEN in Spencer, et al’s Fig. 15” and “[a]s shown in Fig. 13A, the WHLSEN signal is not provided to shifter motor (29).” (Req. for Reh’g 9.)

Appellant’s argument is not persuasive. Page 5, lines 1-5 of the Decision (i.e., FF 1) articulates:

The controller 21 generates a shift control signal based on a wheel speed sensor 23, a cadence sensor 24, a front derailleur position sensor 25, a rear derailleur position sensor 26, a chain tension sensor 27, and a clinometer 28. (Emphasis added.)

The bridging paragraph at pages 12-13 of the Decision further states:

Spencer teaches an automatic transmission system 20 for a bicycle including a shifter motor 29 that receives a signal from a controller 21 based on readings from one of many sensors,

including a wheel speed sensor 23. (FF 1.) In other words, the reading from the wheel speed sensor 23 that is transmitted to the controller 21 and the shifter motor 29 corresponds to the claimed “speed indicating signal.” (Emphasis added.)

When read in context, the Decision articulates that a signal is transmitted to the controller 21 from one of many sensors (e.g., a wheel speed sensor 23) and, based on the signal from the wheel speed sensor 23, the controller 21 generates a shift control signal. (FF 1.) Thus, contrary to Appellant’s argument (Req. for Reh’g 9), the Decision does not state that the wheel speed sensor 23 of Spencer transmits a signal directly to the shifter motor 29.

Next, Appellant argues that the Board has misidentified the claim feature of a “second electrical bicycle component.” (Req. for Reh’g 9.) In particular, Appellant argues that “claim 39 requires the *second electrical bicycle component* to receive the composite signal that includes such speed indicating signals, and that would correspond to Spencer’s display (31), not to Spencer, et al’s controller (21).” (Req. for Reh’g 9.)

This argument also is not persuasive. As discussed previously, the wheel speed sensor 23 of Spencer transmits a signal to the controller 21. (FF 1.) Furthermore, Spencer teaches that the display 31 indicates wheel speed. (FF 1.) In other words, based on the wheel speed sensor 23, the controller 21 transmits signals to the display 31 to indicate wheel speed.

Claim 40

Appellant argues that “[t]he misunderstanding set forth for claim 39 applies to claim 40 as well” (Req. for Reh’g 9) and presents similar arguments with respect to claim 40 (Req. for Reh’g 9-10). However, the

arguments presented are not persuasive for the reasons previously discussed with respect to claim 39.

CONCLUSION

The Request for Rehearing has been considered and is *granted* to the extent that we find that the shifter motor 29 of Spencer would not implicitly teach a CPU for receiving control signals from the controller. The Request for Rehearing is otherwise *denied*. Accordingly, the Request for Rehearing is *granted-in-part*.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

REHEARING GRANTED-IN-PART

Appeal 2009-007794
Application 10/604,813

BAUMEISTER, *Administrative Patent Judge*, CONCURRING:

Appellant has not alleged that the alternative rationale set forth in my Concurring Opinion overlooked or misapprehended any points of law or fact. Accordingly, I would deny the rehearing for the reasons I set forth previously.

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